NEW SAW-FLIES FROM MAINE AND NEW YORK (HYMENOPTERA). BY ALEX. D. MACGILLIVRAY. University of Illinois, Urbana, Ill.

All the adults of the following species were reared from larvæ. They are published at this time in order that the names can be used with descriptions of the larvæ.

Pteronidea evanida, n. sp.—Female. Body black with the following parts rufous: supraclypeal area, clypeus, labrum, mandibles, occipital and vertical orbits, extending onto the caudal aspect of head, collar, femora, profemora and mesofemora more or less irregularly infuscated, protibiæ, mesotibiæ, protarsi, mesotarsi, abdomen on segments one to six; trochanters whitish; ocellar basin sharply marked with vertical walls, dorsal side of frontal crest three sided; supraclypeal area elevated; median fovea longer than broad, deep, prominent; clypeus faintly semicircularly emarginate; antennæ with third, fourth and fifth segments subequal; head, mesonotum, mesoscutellum, and mesopleuræ dull, finely setaceous; wings hyaline, veins including costa reddish, stigma darker, margined with rufous; saw-guides with dorsal margin straight, ventral margin strongly convex, oblique, prominent point at dorsal angle. Length 7 mm.

Male.—Male differs in having median fovea longer, legs and collar lighter in colour, and abdominal segments one to five and lateral portions of six rufous.

Habitat.—Orono, Maine. Maine Agricultural Experiment Station, Subs. 119, 111, 134.

This species is near *fulvicrus* Prov., but the two species are distinguishable by the form of the median fovea.

Pteronidea edura, n. sp.—Female: Body black with the following parts whitish: supraclypeal area, clypeus, labrum, mandibles in part, mouth-parts, collar, tegulæ, and legs beyond the middle of the coxæ, except the distal half of metatibiæ and metatarsi; following parts rufous: edge of frontal crest, occipital and vertical orbits faintly, caudal portion of first abdominal segment, second to sixth segments entirely, and cephalic part of sixth segment; ocellar basin moderately distinct; frontal crest rounded, unbroken, three-sided on dorsal margin; median fovea distinct, long, wedge-shaped depression; clypeus broadly angularly emarginate; antennæ with third and fourth segments sub-equal, fourth segment longer than fifth; mesonotum dull, setaceous, meso-scutellum polished, mesopostscutellum densely punctulate; wings hyaline, dotted with numerous black spinulæ, veins black, proximal portion of costa paler; saw-guides with dorsal margin concave, ventral margin convex and converging toward dorsal margin, distal end bluntly pointed. Length 8 mm.

Habitat.—Ithaca, New York, H. Yuasa. No. 8.45(?)^c-1-1.

This species runs to lombarda Marl., but is differently coloured from the female of that species.

Pteronidea effusa, n. sp.—Female. Body black with the following parts yellowish white: supraclypeal area, clypeus, labrum, mandibles, mouth-parts, collar broadly, tegulæ, and legs beyond distal ends of coxæ, except infuscated distal half of metatibiæ and the black metatarsi; following parts rufous: frontal crest, occipital and vertical orbits, lateral third of lateral lobes of mesonotum indistinctly, and abdominal segments one to seven except small cephalic October, 1920

margin of first segment, and mesal spots on caudal margin of sixth and seventh segments; ocellar basin deep, distinct; frontal crest prominent, unbroken, curved on dorsal margin; median fovea shallow, elongate oval; clypeus broadly, shallowly emarginate; head dull, sparsely setaceous; mesoscutellum polished, mesonotum dull, caudal margin of mesopostscutellum punctured with small calices; mesopleura polished; antennæ with third and fourth segments subequal, fourth segment distinctly longer than fifth; wings hyaline, spinulæ inconspicuous, rúfous, veins and costa and stigma in great part rufous; saw-guides with dorsal margin concave, ventral margin convex, converging toward distal end. Length 8 mm.

Habitat.-Orono, Maine. Maine Agricultural Experiment Station, Sub. 110.

This species is similar to *edura* MacG., but the form of the frontal crest will separate them.

Pteronidea effeta, n. sp.—Female. Body black with the following parts yellowish white: clypeus, labrum, supraclypeal area, mouth-parts, collar, tegulæ, caudal angles of lateral lobes of mesonotum, and legs beyond coxæ except distal half of metatibiæ and metatarsi; following parts rufous: caudal portion of first abdominal segment, segments two to six entirely, most of seventh, frontal crest, and occipital and vertical orbits; clypeus broadly deeply emarginate: supraclypeal area swollen; median fovea elongate, linear, comparatively deep; frontal crest distinct, slightly broken, dorsal margin curved; ocellar basin distinct, not deep, open around median ocellus; each side of lateral ocelli depressed; surface for most part polished; mesonotum including mesoscutellum and mesopostscutellum polished, roughened with distinct calices of minute setæ; antennæ with third segment slightly longer than fourth, fourth and fifth subequal; wings hyaline, veins and stigma and costa rufous; saw-guides robust, dorsal margin concave, ventral margin convex, distal portion oblique, bluntly pointed above. Length 10 mm.

Habitat.—Orono, Maine. Maine Agricultural Experiment Station, Sub. 158.

This species runs to *populi* Marl., but the topography of the head will separate the two species.

Pteronidea emerita, n. sp.—Female. Body black with the following parts yellowish: labrum, clypeus, supraclypeal area, mandibles, mouth-parts, collar, tegulæ, and legs except distal three-fourths of metatibiæ and metatarsi; following parts rufous: frontal crest, occipital and vertical orbits, and abdominal segments one to six; clypeus broadly, shallowly emarginate; median fovea a large, slightly depressed, triangular area; frontal crest strong, narrow, unbroken, ocellar basin deep, open about median ocellus, strongly elevated above postocellar area; antennæ with third segment longer than fourth, and fourth distinctly longer than fifth; head and thorax polished, with numerous minute setæ, mesoscutellum bare, mesopostscutellum with caudal margin roughened; wings hyaline, veins and costa and stigma reddish; spinulæ point-like, black; saw-guides with straight dorsal margin, convex ventral margin, converging convex distal portion, blunt distal end. Length 9 mm.

Habitat.—Orono, Maine. Maine Agricultural Experiment Station, Sub. 139.

This species is very similar in general appearance to effeta MacG.

Pteronidea erudita, n. sp.—Female. Body black with the following parts yellowish: labrum, clypeus, mandibles, supraclypeal area, collar, tegulæ,

lateral half of each lateral lobe of the mesonotum, and legs beyond middle of coxæ except distal third of metatibiæ and metatarsi; following parts rufous: frontal crest, occipital and vertical orbits, and abdominal segments two to seven; clypeus broadly, shallowly emarginate; median fovea elongate, shallow, furrowlike; frontal crest broken, high adjacent to meson, low on lateral portions, dorsal margin two sided; ocellar basin shallow, flat, open about median ocellus, hardly raised above postocellar area; antennæ with third, fourth, and fifth segments subequal; head and thorax polished, with closely-placed calices of fine setæ; mesopostscutellum roughened; wings hyaline, veins and costa and stigma reddish; saw-guides narrow, dorsal margin straight, ventral margin convex, distal portion straight and convergent, pointed. Length 7 mm.

Habitat.—Orono, Maine. Maine Agricultural Experiment Station, Sub. 12.

This species is similar to *effeta* MacG. and *emerita* MacG. The colour of the mesonotum will distinguish them.

Pteronidea edita, n. sp.— Male. Body black with the following parts yellowish: clypeus, labrum, supraclypeal area, mandibles, genal orbits, pronotum broadly, tegulæ, legs except metacoxæ and distal end of metatibiæ and metatarsi, and caudal margin of abdominal terga and venter entirely; following parts rufous: occipital and vertical orbits broadly, frontal orbits narrowly; median fovea deep, broad, longer than broad; antennæ with third segment slightly longer than fourth and latter slightly longer than fifth; frontal crest obscure, broken; ocellar basin shallow, flat, lateral walls distinct but narrow and low; head and thorax dull with numerous subadjacent calices; mesopleura, particularly ventral portion, with numerous short, white setæ; caudal margin of last sternum angularly emarginate; wings hyaline, stigma with costal portion dark, remainder yellowish, costa yellowish, veins blackish. Length 6 mm.

Habitat.—Ithaca, New York. H. Yuasa. No. 51-1-6.

This species runs to *ventralis* Say, but the difference in their coloration will differentiate them.

Pteronidea exacta, n. sp.—Male. Body black with the following parts white: labrum, clypeus, supraclypeal area, mandibles, mouth-parts, genal orbits, collar broadly, tegulæ, and legs except a fuscous ring on distal end of metatibiæ; following parts rufous: occipital and vertical orbits broadly, frontal orbits narrowly; clypeus roundly, shallowly emarginate; supraclypeal area not prominent; median fovea a small, rather deep pit; frontal crest fairly strong, unbroken, transverse, straight; ocellar basin shallow, lateral walls hardly elevated, surface flat, open between ocelli, and not as high as postocellar area; antennæ with third segment slightly longer than fourth, and fourth slightly longer than fifth; head and thorax setaceous; mesoscutellum polished, mesopostscutellum somewhat roughened; procidentia short, rounded, strongly convex; wings hvaline, veins and costa and stigma vellowish. Length 4.5 mm.

Habitat.-Orono, Maine. Maine Agricultural Experiment Station, Sub. 172.

This species is similar to *dubia* Marl., but the length of the third antennal segment will separate them.

Pteronidea equina, n. sp. Female. Body black with the following parts yellowish white: supraclypeal area, clypeus, labrum, mandibles, mouth-parts, genal and occipital and vertical orbits broadly, frontal orbits narrowly,

orbital markings more brownish than others, antennæ for most part, collar, tegulæ, mesopleuræ for most part, mesosternum, sides of mesoscutellum, legs except distal portion of metatibiæ and metatarsi, venter of abdomen entirely, caudal margin of abdominal terga, becoming successively broader on caudal terga, caudal tergum entirely, and saw-guides except tips; clypeus narrowly roundly, emarginate; median foveæ broad, round depression with sloping sides; frontal crest narrow, distinct, unbroken, dorsal margin two-sided; ocellar basin distinct, flat, lateral walls narrow, sharp, and distinct; postocellar area not depressed below ocellar basin; head and thorax setaceous; mesopostscutellum setaceous, not roughened; wings hyaline with numerous spinulæ, veins and stigma and costa yellowish; saw-guides with dorsal margin straight, ventral margin straight, distal portion oblique, convex, bluntly pointed above. Length 5.5 mm.

Habitat.—Orono, Maine. Maine Agricultural Experiment Station, Sub. 71. This species runs to *kincaidi* Marl. Its coloration is distinctive.

Pteronidea enavata, n. sp.—Female. Body rufous with the following parts black: small, transverse area surrounding ocelli, small spot on caudal margin of postocellar area, antennæ, mesal area of median lobe of mesonotum, mesopostscutellum in great part, metascutellum, ring on metatibiæ, and cephalic band, narrower on caudal segments, on abdominal terga; following parts whitish: labrum, pronotum, tegulæ, and legs in great part, except tarsi; clypeus broadly emarginate, almost truncate; median fovea pit-like, deep; frontal crest broken by oblong depression bearing median fovea, two-sides, angular; ocellar basin flat, roughened, limiting lateral walls narrow, not strongly raised; antennæ with third and fourth segments subequal, fifth shorter; head and thorax dull, setaceous; wings yellowish, veins and costa and stigma pale, spinulæ not prominent; saw-guides with dorsal margin straight, ventral margin convex, distal portion oblique, pointed at distal end above. Length 6 mm.

Habitat.—Orono, Maine. Maine Agricultural Experiment Station, Sub. 25. This species resembles *pinguidorsum* Dyar, but they are easily separated by the difference in the form of the head ridges.

Pristiphora ostiaria, n. sp.—Female. Body black with the following parts white: labrum, mandible, mouth-parts, collar broadly, tegulæ, and legs except a spot on proximal end of metacoxæ, distal one-fourth of metafemora, distal one-third of metatibiæ, and metatarsi; antennæ with third segment longer than fourth, fourth and fifth subequal; clypeus truncate; median fovea an inconspicnous depression; frontal crest wanting; ocellar basin distinguishable, lateral walls not conspicuous; head uniformly finely punctured; occipital, ocellar, and interocellar furrows wanting; mesonotum including mesoscutellum and mesopostscutellum, polished; mesopleuræ with white setæ; wings hyaline, veins and stigma brownish, costa pale, spinulæ numerous; saw-guides narrow with dorsal margin straight, ventral margin convex, distal end oblique and blunt. Length 6 mm.

Male.—The male differs in having supraclypeal area, genal orbits, clypeus, and venter of abdomen pale; median fovea is larger and more conspicuous; procidentia is comparatively broad, flat, rounded. Length 5 mm.

Habitat.—Ithaca, New York. H. Yuasa. No. 212-1-1.

This species is near *banksi* Marl., but they can be separated by the difference in coloration.